

POSITION DESCRIPTION

Data Engineer
(POS2664)

Directorate:	Customer and Business Performance	Department:	Information Technology
Position Grade:	16	Reports to:	Coordinator, Data and Information
Last review:	October 2023	Next review:	October 2025
		Version No.:	0.1

Position purpose:

The role serves as a pivotal driver in the organization's data strategy, harnessing cutting-edge technical acumen to conceptualize, construct, and continually enhance a comprehensive data infrastructure. By spearheading the design, implementation, and fine-tuning of robust data pipelines and architectures, this position facilitates the seamless aggregation, organization, and accessibility of diverse datasets. Through these efforts, the role empowers stakeholders with timely, accurate, and actionable insights, fostering informed decision-making and innovation across the organization. The position seeks to optimize data systems, ensuring reliability, scalability, and security, while collaborating with cross-functional teams to understand, interpret, and cater to diverse data needs. Additionally, it plays a pivotal role in staying abreast of emerging technologies and industry best practices, driving the continuous evolution and improvement of the data landscape to meet the dynamic requirements of the business.

Key accountabilities/responsibilities:

- Responsible for:
- 1) Provide an exceptional customer experience to all stakeholders, maintaining a positive and professional attitude in all interactions.
 - 2) Design and develop scalable data pipelines for collecting, processing, and storing data from various sources.
 - 3) Build and maintain databases, data systems, and data warehouses that support a variety of data initiatives.
 - 4) Collaborate with cross-functional teams to understand data requirements and implement efficient solutions.
 - 5) Optimize data infrastructure for performance and reliability.
 - 6) Identify opportunities to improve data reliability, efficiency, and quality.
 - 7) Develop and maintain documentation related to data infrastructure and processes.
 - 8) Implement best practices for data security and compliance.
 - 9) Other duties as directed and authorised by Chief Information Officer

Decisions made in the position:

- 1) The position has no formal delegation of authority.

Decisions referred:

- 1) Not applicable

Key issues/challenges:

- 1) Managing and ensuring the scalability and performance of data systems as the volume, velocity, and variety of data grow.
- 2) Maintaining and ensuring data quality and integrity across various sources, especially when dealing with large datasets from multiple origins.
- 3) Ensuring the protection of sensitive data and adherence to regulatory frameworks such as the Australian Privacy Act and other relevant standards.
- 4) Staying updated with evolving technologies, selecting appropriate tools and frameworks, and avoiding technical debt while ensuring compatibility and efficiency within the data ecosystem.

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- 5) Collaborating effectively with different departments and stakeholders, aligning data engineering efforts with business objectives, and meeting diverse data-related requirements through clear communication and shared goals.

Key working relationships:

- Chief Information Officer
- IT Team
- Internal Stakeholders
- External Partners and Vendors

POSITION SPECIFICATION

Whilst the criteria described below is indicative of the nature of this role, for the purpose of this hiring process please only address the selection criteria listed in the job application.

ESSENTIAL CRITERIA

Qualifications/Licences

- Relevant formal qualifications in information technology or suitable business orientated degree and/or equivalent industry experience gained by practical application over a minimum of 3 years
- Driving License Class C (Car)
- Certifications in Microsoft technologies, ITIL or ITSM

Experience

- Demonstrated experience in data engineering, involving the design, development, and maintenance of data infrastructure and systems. A solid background in managing large-scale data sets, including data collection, processing, storage, and retrieval.
- Track record in designing and managing databases and data warehouses. Practical knowledge of data architecture, data modeling, and database design principles to create efficient and optimized data systems.
- Hands-on experience working with cloud platforms such as AWS, Azure, or Google Cloud, encompassing the deployment and management of data-related services on these platforms.
- Experience in identifying and resolving bottlenecks in data systems, optimizing data pipelines, and improving overall data infrastructure performance and reliability.
- Proven ability to collaborate effectively with cross-functional teams, including data scientists, analysts, IT professionals, and business stakeholders. Experience in understanding and addressing diverse data requirements from different departments within a government context.

Knowledge and Skills

- Knowledge of Work Health and Safety practices, the principles of Equal Employment Opportunity, ethical practice and multi-cultural diversity
- Expertise in utilising cloud-based technologies for data engineering, showcasing proficiency in programming languages for scripting, database management in various cloud environments (AWS, Azure, GCP), and employing cloud services for data storage, processing, and analysis.
- Familiarity with data security practices and compliance with relevant regulatory frameworks. Prior experience in ensuring data protection, privacy, and compliance with government standards, such as the Australian Privacy Act.

DESIRABLE CRITERIA

Qualifications/Licences/Experience/Knowledge and Skills

- Microsoft Data certifications (e.g. Azure Data Engineer)
- Familiarity with machine learning algorithms and artificial intelligence techniques
- Local Government experience

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**Aspiring to do great things – for ourselves,
our community and our growing city.**

Our values:

Ambitious

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